

Federal Aviation Administration, DOT

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AUTHORITY: 49 U.S.C. 106(g), 40113, 44701, 44702 and 44704.

SOURCE: Docket No. 5066, 29 FR 18291, Dec. 24, 1964, unless otherwise noted.

SPECIAL FEDERAL AVIATION REGULATION No. 13

1. *Applicability.* Contrary provisions of the Civil Air Regulations regarding certification notwithstanding,¹ this regulation shall provide the basis for approval by the Administrator of modifications of individual Douglas DC-3 and Lockheed L-18 airplanes subsequent to the effective date of this regulation.

2. *General modifications.* Except as modified in sections 3 and 4 of this regulation, an applicant for approval of modifications to a DC-3 or L-18 airplane which result in changes in design or in changes to approved limitations shall show that the modifications were accomplished in accordance with the rules of either Part 4a or Part 4b in effect on September 1, 1953, which are applicable to the modification being made: *Provided*, That an applicant may elect to accomplish a modification in accordance with the rules of Part 4b in effect on the date of application for the modification in lieu of Part 4a or Part 4b as in effect on September 1, 1953: *And provided further*, That each specific modification must be accomplished in accordance with all of the provisions contained in the elected rules relating to the particular modification.

3. *Specific conditions for approval.* An applicant for any approval of the following specific changes shall comply with section 2 of this regulation as modified by the applicable provisions of this section.

(a) *Increase in take-off power limitation—1,200 to 1,350 horsepower.* The engine take-off power limitation for the airplane may be increased to more than 1,200 horsepower but not to more than 1,350 horsepower per engine if the increase in power does not adversely affect the flight characteristics of the airplane.

(b) *Increase in take-off power limitation to more than 1,350 horsepower.* The engine take-off power limitation for the airplane may be increased to more than 1,350 horsepower per engine if compliance is shown with the flight characteristics and ground handling requirements of Part 4b.

(c) *Installation of engines of not more than 1,830 cubic inches displacement and not having*

¹It is not intended to waive compliance with such airworthiness requirements as are included in the operating parts of the Civil Air Regulations for specific types of operation.

a certificated take-off rating of more than 1,350 horsepower. Engines of not more than 1,830 cubic inches displacement and not having a certificated take-off rating of more than 1,350 horsepower which necessitate a major modification or redesign of the engine installation may be installed, if the engine fire prevention and fire protection are equivalent to that on the prior engine installation.

(d) *Installation of engines of more than 1,830 cubic inches displacement or having certificated take-off rating of more than 1,350 horsepower.* Engines of more than 1,830 cubic inches displacement or having certificated take-off rating of more than 1,350 horsepower may be installed if compliance is shown with the engine installation requirements of Part 4b: *Provided*, That where literal compliance with the engine installation requirements of Part 4b is extremely difficult to accomplish and would not contribute materially to the objective sought, and the Administrator finds that the experience with the DC-3 or L-18 airplanes justifies it, he is authorized to accept such measures of compliance as he finds will effectively accomplish the basic objective.

4. *Establishment of new maximum certificated weights.* An applicant for approval of new maximum certificated weights shall apply for an amendment of the airworthiness certificate of the airplane and shall show that the weights sought have been established, and the appropriate manual material obtained, as provided in this section.

NOTE: Transport category performance requirements result in the establishment of maximum certificated weights for various altitudes.

(a) *Weights-25,200 to 26,900 for the DC-3 and 18,500 to 19,500 for the L-18.* New maximum certificated weights of more than 25,200 but not more than 26,900 pounds for DC-3 and more than 18,500 but not more than 19,500 pounds for L-18 airplanes may be established in accordance with the transport category performance requirements of either Part 4a or Part 4b, if the airplane at the new maximum weights can meet the structural requirements of the elected part.

(b) *Weights of more than 26,900 for the DC-3 and 19,500 for the L-18.* New maximum certificated weights of more than 26,900 pounds for DC-3 and 19,500 pounds for L-18 airplanes shall be established in accordance with the structural performance, flight characteristics, and ground handling requirements of Part 4b: *Provided*, That where literal compliance with the structural requirements of Part 4b is extremely difficult to accomplish and would not contribute materially to the objective sought, and the Administrator finds that the experience with the DC-3 or L-18 airplanes justifies it, he is authorized to accept such measures of compliance as he finds will effectively accomplish the basic objective.

(c) *Airplane flight manual-performance operating information.* An approved airplane flight manual shall be provided for each DC-3 and L-18 airplane which has had new maximum certificated weights established under this section. The airplane flight manual shall contain the applicable performance information prescribed in that part of the regulations under which the new certificated weights were established and such additional information as may be necessary to enable the application of the take-off, en route, and landing limitations prescribed for transport category airplanes in the operating parts of the Civil Air Regulations.

(d) *Performance operating limitations.* Each airplane for which new maximum certificated weights are established in accordance with paragraphs (a) or (b) of this section shall be considered a transport category airplane for the purpose of complying with the performance operating limitations applicable to the operations in which it is utilized.

5. *Reference.* Unless otherwise provided, all references in this regulation to Part 4a and Part 4b are those parts of the Civil Air Regulations in effect on September 1, 1953.

This regulation supersedes Special Civil Air Regulation SR-398 and shall remain effective until superseded or rescinded by the Board.

[19 FR 5039, Aug. 11, 1954. Redesignated at 29 FR 19099, Dec. 30, 1964]

SPECIAL FEDERAL AVIATION REGULATION No. 109

1. *Applicability.* Contrary provisions of 14 CFR parts 21, 25, and 119 of this chapter notwithstanding, an applicant is entitled to an amended type certificate or supplemental type certificate in the transport category, if the applicant complies with all applicable provisions of this SFAR.

Operations

2. General.

(a) The passenger capacity may not exceed 60. If more than 60 passenger seats are installed, then:

(1) If the extra seats are not suitable for occupancy during taxi, takeoff and landing, each extra seat must be clearly marked (e.g., a placard on the top of an armrest, or a placard sewn into the top of the back cushion) that the seat is not to be occupied during taxi, takeoff and landing.

(2) If the extra seats are suitable for occupancy during taxi, takeoff and landing (*i.e.*, meet all the strength and passenger injury criteria in part 25), then a note must be included in the Limitations Section of the Airplane Flight Manual that there are extra seats installed but that the number of passengers on the airplane must not exceed 60.